

We Claim:

- 5 1. A method of inhibiting angiogenesis in an animal comprising administering to the animal an angiogenesis inhibiting amount of a composition comprising a serine protease and a pharmaceutically acceptable excipient.
- 10 2. The method of Claim 1, wherein the serine protease is selected from the group consisting of kallikreins, human glandular kallikrein, pancreatic/renal kallikrein and prostate-specific antigen, or an antiangiogenic fragment thereof.
- 15 3. The method of Claim 2, wherein the prostate-specific antigen has the amino acid sequence as set forth in SEQ ID NO: 1, or an antiangiogenic fragment thereof.
- 20 4. The method of Claim 1, wherein the composition further comprises ANGIOSTATIN® protein.
5. The method of Claim 1, wherein the composition further comprises ENDOSTATIN® protein.
- 25 6. The method of Claim 1, wherein the animal has an angiogenesis-mediated disease selected from the group consisting of angiogenesis-dependent cancers; benign tumors; rheumatoid arthritis; psoriasis; ocular angiogenesis diseases; Osler-Webber Syndrome; myocardial angiogenesis; plaque neovascularization; telangiectasia; hemophiliac joints;
30 angiofibroma; wound granulation; intestinal adhesions, atherosclerosis, scleroderma, hypertrophic scars, cat scratch disease and *Helicobacter pylori* ulcers.

7. A method of inhibiting cell proliferation comprising, administering to a cell undergoing proliferation a proliferation inhibiting amount of a composition comprising kallikrein to inhibit cell proliferation.
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8. The method of Claim 8, wherein the cell proliferation is endothelial cell proliferation.
9. The method of Claim 7 wherein the serine protease is selected from the group consisting of kallikreins, human glandular kallikrein, pancreatic/renal kallikrein and prostate-specific antigen, or an antiangiogenic fragment thereof.
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10. The method of Claim 7, wherein the prostate specific antigen has the amino acid sequence SEQ ID NO: 1, or an antiproliferative fragment thereof.
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11. The method of Claim 7, wherein the composition further comprises ANGIOSTATIN® protein.
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12. The method of Claim 7, wherein the composition further comprises ENDOSTATIN® protein.
13. The method of Claim 7, wherein the cell proliferation is related to an angiogenesis-mediated disease.
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14. The method of Claim 13, wherein the angiogenesis-mediated disease is selected from the group consisting of angiogenesis-dependent cancers; benign tumors; rheumatoid arthritis; psoriasis; ocular angiogenesis diseases; Osler-Webber Syndrome; myocardial angiogenesis; plaque neovascularization; telangiectasia; hemophiliac joints; angiofibroma; wound granulation; intestinal adhesions, atherosclerosis, scleroderma, hypertrophic scars, cat scratch disease and *Helicobacter pylori* ulcers.
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- 5 15. A method of diagnosing a disease or determining the prognosis of a disease mediated by angiogenesis comprising obtaining a biological sample and determining the levels of serine proteases in the sample.
- 10 16. The method of Claim 15 wherein the serine protease is selected from the group consisting of kallikreins, human glandular kallikrein, pancreatic/renal kallikrein and prostate-specific antigen, or an antiangiogenic fragment thereof.
- 15 17. The method of Claim 16 wherein the prostate-specific antigen has the amino acid sequence as set forth in SEQ ID NO: 1, or an anti-angiogenic fragment thereof.
18. The method of Claim 15 wherein the composition further comprises ANGIOSTATIN® protein.
- 20 19. The method of Claim 15 wherein the composition further comprises ENDOSTATIN® protein.
- 25 20. The method of Claim 15, wherein the angiogenesis-mediated disease is selected from the group consisting of angiogenesis-dependent cancers; benign tumors; rheumatoid arthritis; psoriasis; ocular angiogenesis diseases; Osler-Webber Syndrome; myocardial angiogenesis; plaque neovascularization; telangiectasia; hemophiliac joints; angiofibroma; wound granulation; intestinal adhesions, atherosclerosis, scleroderma, hypertrophic scars, cat scratch
- 30 disease and *Helicobacter pylori* ulcers.